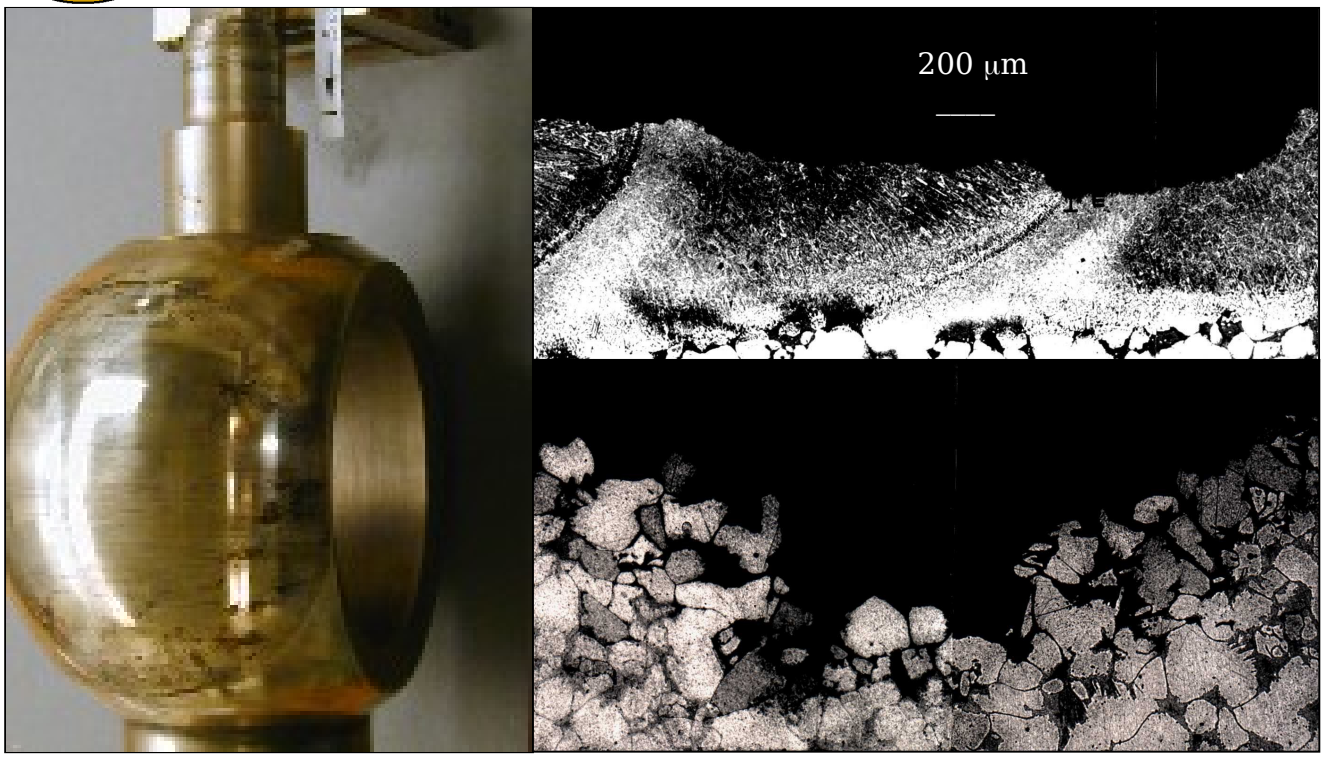
Laser Welding of Nickel Aluminum Bronze
TTCP MAT TP1



Left: Laser clad ball valve after 6 years service in a submarine. Right: Depth of corrosion on laser clad component (top) is less than that on base material (bottom). Improvements in cavitation-erosion and erosion-corrosion resistance have also been demonstrated.

Program Name: Low Heat Input Welding of Nickel Aluminum Bronzes

Objective: Knowledge needed to use low heat input welding of nickel aluminum bronzes on war-ships

Payoff: Proof of concept. Guidelines for optimization of clad surface properties.

Future Activities: Adapt techniques to new assignment on other materials. Transfer to Industry

DSTO DRDC, RMC, NRC MTL DERA

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